The Clinical Information HOTLINE answers this question every day from callers around the globe. The first HOTLINE newsletter, published in June of 1996, addressed the presence of jewelry during a surgical procedure.

Since that time body piercing has become increasingly popular. It is not uncommon for individuals to have multiple piercings in one or more locations on the body. These jewelry applications require special consideration by office and facility-based medical and nursing personnel when surgery is scheduled.

As a general rule, jewelry should not accompany the patient to the hospital to avoid loss or possible theft. Ideally, this rule should be reviewed with the patient well in advance of the surgical procedure and the patient encouraged to leave all jewelry at home. This advance planning allows patients with body jewelry the opportunity to have the item temporarily removed. If the patient does arrive wearing jewelry, it should be removed and given to a family member for safekeeping. If a family member is not present, the jewelry should be stored according to policy. If jewelry cannot be easily removed and will not physically interfere with the surgical procedure, it is suggested the item be covered with gauze (i.e. small 2x2) and taped into place. Securing jewelry in this manner optimizes the interface between the skin and the jewelry, reducing the possibility of current concentration. A special challenge exists for certain body piercings because covering and taping may not be an option. If it is deemed necessary to remove the body jewelry because of its close proximity to the surgical site (e.g. tongue ring and T&A), special opening and closing pliers need to be readily available. Suppliers of these tools can be located by contacting a body-piercing establishment in your area or by calling the Clinical Information HOTLINE.

Conventional jewelry items such as rings and bracelets are of special concern because of their constricting nature. The potential for swelling during the entire perioperative surgical experience should be considered. Another ever-present risk is that of infection from microorganisms harbored in the contours of jewelry. Infection prevention is a desired nursing outcome and one that is not well served by the presence of jewelry.

Electrosurgery and the presence of jewelry is not the safety hazard it once was due to improvements in technology. The Emergency Care Research Institute (ECRI) states, “the removal of jewelry is not necessary to avoid patient burns during electrosurgery” yet “in general recommends hospitals encourage patients to leave jewelry at home”. The development of isolated generator technology transfers the therapeutic current back to the electrosurgical unit via the patient return electrode, instead of to ground. By removing ground as a reference for the current, the isolated generator eliminates many of the hazards inherent in grounded systems, most importantly current division and alternate site burns. Although isolated generators virtually eliminate the risk of alternate site injury, it is considered prudent to remove any jewelry in the direct path of the current as it travels from the active electrode to the patient return electrode. Therefore it is important to know the type of generator technology at your facility. If this information is not known, contact your Biomedical Department or the device manufacturer. It may also be helpful to label the generator accordingly, if not standardized on isolated technology.
Use of isolated generator technology does not guarantee patient safety. Other risks in addition to the ones previously mentioned exist if the decision is made to leave jewelry in place and it is not covered. Caution must be exercised to avoid direct contact of the jewelry item with the deactivated electrode tip. Residual heating from previous activation can leave the tip very hot. Direct contact to metal jewelry with a deactivated electrode can conduct this residual heat and result in patient injury. Direct coupling or direct contact of the activated electrode to jewelry is yet another avenue of potential injury. When the active accessory is not in use, it should be placed in a non-conductive safety holster. The active cord as well as the patient return electrode cord are insulated, but cannot confine all of the radio frequency (RF) current. As a result, the RF current leaks or escapes from the cord. If a cord is in direct contact with jewelry, leakage current can transfer to the jewelry and the potential again exists for patient injury. The chance of current leakage increases if the cord insulation is compromised by nicks, cuts, or cracks. The current can escape at these points and may injure the patient.

The presence of jewelry creates a variety of risk factors. Patient safety is of utmost importance and many device manufacturers, together with AORN and ECRI, advocate for the removal of jewelry as a general practice. Efforts to reduce the incidence of patients coming to surgery with jewelry requires a team approach among all individuals, departments and doctor’s offices involved with scheduling a patient for surgery. Interventions for patients coming to surgery with jewelry can range from requiring the patient sign a waiver and assuming responsibility to a costly cancellation of the case. To minimize confusion, policies should be drafted and adhered to since each situation will be different. Educating the patient about the potential risks associated with wearing jewelry is a necessary step in providing for a positive surgical experience.